Lepidium davisii Rollins (1948)

DAVIS PEPPERGRASS

FAMILY: *Brassicaceae*, the mustard family.

SYNONYMS: Lepidium montanum ssp. davisii

STATUS:

Heritage Program SENSITIVE LIST, ranks: G3 S1

USFWS/ESA: species of concern. STATE OF NEVADA: none. BLM: none. USFS: none. NNNPS: watch list.

POPULATION CENSUS (NEVADA): 2 occurrences mapped; total estimated individuals 33,000, total estimated area 9.0 ha (22.2 ac). TREND: unknown.

IMPACTS AND MAJOR THREATS (NEVADA): No summary available (see references).

INVENTORY EFFORT (**NEVADA**): Not yet systematically surveyed in Nevada. One occurrence was found during an aerial survey. Most recent entered survey 1998, average year of last survey 1997.

Years since last entered survey (percent of mapped records at various survey ages): 0-5 yrs: 50%; 6-10 yrs: 50%.

LAND MANAGEMENT (NEVADA): U. S. Bureau of Land Management.

RANGE: Elko County, Nevada; also in ID and OR. In Nevada known only from the northern Owyhee Desert in the South Fork Owyhee River drainage. Maximum Nevada **range dimension 26.0 km (16.2 mi)**. **Type specimen** collected in Idaho, Elmore co.

ELEVATIONS RECORDED (NEVADA): 5125-5200 feet (1562-1585 meters).

HABITAT (**NEVADA**): Hard-bottomed clay playas on volcanic plains in the sagebrush zone with sparse associated Atriplex confertifolia and Artemisia cana, surrounded by Artemisia tridentata vegetation. During spring, the playas are usually inundated up to a foot deep. Aquatic or wetland-dependent in Nevada.

PHENOLOGY: flowering late-spring to summer, May - August (Meinke 1982). Range of most frequent **survey months:** July.

LIFE-FORM AND HABIT: small perennial herb.

DESCRIPTION: A caespitose, deep-rooted perennial mustard forming irregular or regular clumps; stems slender, mostly unbranched or sometimes branched, 4-8 cm tall, pubescent with small, simple hairs; leaves simple, sessile, entire to toothed or pinnately lobed, greenish but often gray with adhering clay, sparingly pubescent to glabrous, 1-2.5 cm long; inflorescence subcorymbose; petals white, 2-3 mm long; siliques crowded, glabrous to sparingly pubescent, slightly notched at apex, 3-5 mm long; style slightly longer than the notch. **Distinguishing features:** Perennial cruciferous plant with simple leaves growing on hard clay bottom playas with no (or a few) associated plants.

PHOTOGRAPHS: Nevada Natural Heritage Program images web page (1998-present), slide collection (1986-present), and files.

ILLUSTRATIONS: none known.

OTHER GENERAL REFERENCES (listed separately): Rollins (1993).

SPECIFIC REFERENCES:

Moseley, R. K. 1995. Report on the conservation status of Lepidium davisii. Boise: Idaho Conservation Data Center, prepared for the Idaho Department of Fish and Game and the Idaho Department of State Parks and Recreation. Rollins, R. C. 1948. On two perennial caespitose Lepidiums of western North America. Madroño 9: 162-165.

OF FURTHER INTEREST: It has been observed that plants show distinct inter-playa differences in leaf size and shape, and plant phenology suggesting that it disperses poorly, and that there is minimal pollination between neighboring playas. It is suggested that each playa be considered a separate population (USFWS 1994). Synonym: Lepidium montanum Nutt. ssp. davisii (Rollins) C.L. Hitchcock.